

AMENDMENTS TO THE CLAIMS

Please amend the claims as set forth below. This listing replaces the prior listing of claims.

1. (Currently Amended) A method for allocating time slots to channels in a time division multiplexed network in which a recurrent frame of the network is divided into time slots and in which circuit-switched channels are [[established]] allocated [[to comprise one or more]] respective sets of time slots in [[a]] said recurrent frame of said network, said method comprising the steps of:

allocating a set of time slots to a circuit-switched first channel;

associating [[a time slot allocated to a]] the allocated set of time slots to said first channel with a [[selected]] first level [[, of at least two available levels,]] of priority;

receiving a request for time slots for a circuit-switched second channel associated with a second level of priority;

comparing said first and second levels of priority, and

determining whether or not to deallocate [[said]] time slots from said first channel, and allocate the deallocated time slots to said second channel, based upon [[a]] said comparison [[of said selected level of priority and a level of priority associated with a request for a time slot for another channel]].

2. (Currently Amended) A method as claimed in claim 1, wherein said determining step comprises determining to deallocate [[said]] time slots from said first channel if said [[request is associated with a higher]] second level of priority is higher than said [[selected]] first level of priority.

3. (Currently Amended) A method as claimed in claim 1, wherein said second level of priority is identified in said request [[determining step comprises determining to deallocate said time slot from said channel if said request is a request for a time slot to be allocated to another channel with a higher level of priority than said selected level of priority.]]

LAW OFFICES OF
MacPherson, Kwok, Chen &
Heid LLP

1762 Technology Drive
Suite 226
San Jose, CA 95110
(408)-392-9520
FAX (408)-392-9262

4. (Currently Amended) A method as claimed in claim 1, wherein said step of determining to deallocate [[said]] time slots from said first channel is performed only if there are [[no]] insufficient non-allocated slots available to satisfy said request.
5. (Currently Amended) A method as claimed in claim 1, wherein said step of determining whether or not to deallocate [[said]] time slots from said first channel is performed only if the first level or priority [[associated with said time slot]] is lower than a highest level of priority.
6. (Currently Amended) A method as claimed in claim 1, wherein said step of determining whether or not to deallocate [[said]] time slots from said first channel is further based upon an evaluation regarding to which channel a time slot was last allocated.
7. (Currently Amended) A method as claimed in claim 1, wherein said step of determining to deallocate [[said]] time slots from said first channel is further based upon an evaluation regarding to which channel a time slot has been allocated the longest period of time.
8. (Currently Amended) A method as claimed in claim 1, wherein said step of determining whether or not to deallocate [[said]] time slots from said first channel is further based upon an evaluation regarding from which channel a time slot was last deallocated.
9. (Currently Amended) A method as claimed in claim 1, wherein said step of determining whether or not to deallocate [[said]] time slots from said first channel is further based upon an evaluation regarding from which channel a time slot should be deallocated in order to counteract time slot fragmentation on the bitstream of interest.
10. (Currently Amended) A method as claimed in claim 1, wherein said associating step comprises associating the allocation of all time slots allocated to said first channel with the same [[selected]] level of priority.
11. (Currently Amended) A method as claimed in claim 1, wherein said associating step comprises associating said first channel with said [[selected]] first level of priority, thereby

associating the allocation of each time slot allocated to said first channel with the same [[selected]] level of priority.

12. (Currently Amended) A method as claimed in claim 1, wherein said associating step comprises associating the allocation of different time slots allocated to said first channel with different levels of priority and wherein said determining step comprises to deallocate from said first channel, and allocated to said second channel, only such time slots that have been allocated to said first channel with a level of priority that are lower than said second level of priority.

13. (Currently Amended) A method as claimed in claim 1, wherein said associating step comprises associating the allocation of time slots allocated to said channel over a first portion of said network with [[a selected]] one level of priority and associating the allocation of time slots allocated to said first channel over another portion of said network with another selected level of priority.

14. (Currently Amended) A method as claimed in claim 1, wherein said associating step comprises changing the level of priority associated with the allocation of [[a]] time slots [[allocated]] to said channel as a consequence of changing bandwidth requirements.

15. (Currently Amended) A method as claimed in claim 1, comprising the step of determining the priority by which said channels are [[is]] to be re-established in case of channel failure based upon [[said selected]] their respective levels [[over]] of priority.

16. (Currently Amended) A method as claimed in claim 1, comprising the step of determining a degree of redundancy requested for [[said]] the channels based upon [[said selected]] their respective levels [[over]] of priority.

17. (Currently Amended) A method as claimed in claim 1, [[wherein said associating step comprises]] comprising selecting said [[selected]] levels of priority based upon the identity of a physical or virtual port or interface to/from which traffic pertaining to [[said]] the respective channel is delivered.

18. (Currently Amended) A method as claimed in claim 1, [[wherein said associating step comprises]] comprising selecting said [[selected]] levels of priority based upon an identification of the type of application that traffic to be transported in [[said]] the respective channel pertains to.

19. (Currently Amended) A method as claimed in claim 1, [[wherein said associating step comprises]] comprising selecting said [[selected]] levels of priority based upon priority information derived from overlying network protocols.

20. (Currently Amended) A method as claimed in claim 1, comprising transmitting information on said [[selected]] level of priority associated with the allocation of [[with said]] time slots to a channel to one or more other nodes of the network in order for said other nodes to be able to switch said channel taking said level of priority into consideration.

21. (Currently Amended) A method for allocating time slots [[to a channel]] in a time division multiplexed network in which a recurrent frame of the network is divided into time slots and in which circuit-switched channels are established to comprise [[one or more]] respective sets of time slots in [[a]] said recurrent frame of said network, said method comprising the steps of:

specifying levels of priority associated with the allocation of time slots to respective established channels;

receiving a request[[ing a]] for time slots for a circuit-switched channel in need of bandwidth, said request being associated with a requested level of priority;

[[allocating to said channel a time slot put at said channel's disposal as a result of said request; and

associating said time slot allocated to said channel with a selected level of priority.]]

determining if there are slots available that are not allocated to any other channel and, if so, allocating such time slots to said circuit switched channel; and, if the amount of time slots so allocated to said circuit-switched channel is insufficient to meet the request; determining if there are time slots allocated to said established channels at a level of priority that is deemed lower than the requested level of priority and, if so, deallocating such time slots from such established channels and allocate so deallocated time slots to said circuit switched channel.

22. (Canceled)

23. (Canceled)

24. (Currently Amended) An apparatus for allocating time slots to channels in a time division multiplexed network in which recurrent frames of the network are divided into time slots and in which circuit-switched channels are [[established]] allocated to [[comprise one or more]] respective sets of time slots in a recurrent frame of said network, said apparatus comprising:

priority assignment means [[(182)]] for associating the allocation of [[a]] time slots [[allocated]] to [[said]] established circuit-switched channels with [[a]] selected levels~~[[, of at least two available levels,]]~~ of priority; and

slot allocating means [[(184)]] provided to receive [[a]] requests for time slots and to [[determine to]] deallocate [[said]] time slots from said established channels, for allocation to said requests, based upon a comparison of [[said selected]] levels of priority associated with the established channels and [[a]] levels of priority associated with said requests.

25. (Currently Amended) An apparatus as claimed in claim 24, comprising a slot utilization table [[(176)]] indicating the [[selected]] level of priority associated with [[said]] the allocation of time slots to established channels.

26. (Original) An apparatus as claimed in claim 25, wherein said priority assignment means is arranged to write information designating that said time slot allocated to said channel is associated with said selected level of priority.

27. (Canceled)

28. (Canceled)

29. (Canceled)

30. (Canceled)

- 31.. (Canceled)
32. (Canceled)
33. (New) Use of a method as claimed in claim 1, for specifying different traffic service classes based upon said priority levels when operating a communication network.
34. (New) Use of a method as claimed in claim 1, for providing channel prioritization based upon said priority levels when interconnecting ports of a data switching or routing apparatus.
35. (New) Use of an apparatus as claimed in claim 24, for specifying different traffic service classes based upon said priority levels when operating a communication network.
36. (New) Use of an apparatus as claimed in claim 24, for providing channel prioritization based upon said priority levels when interconnecting ports of a data switching or routing apparatus.
37. (New) A method as claimed in claim 1, wherein said method is performed at a node of the network and wherein said request is received from another node of the network.
38. (New) A method as claimed in claim 1, wherein said method is performed at a node of the network and wherein said request is received from a user connected to said node.
39. (New) A method as claimed in claim 1, wherein said request is a request for more bandwidth to an already established channel.
40. (New) A method as claimed in claim 1, comprising the step of re-establishing said channels in case of channel failure in a highest level of priority of first order.
41. (New) A method as claimed in claim 1, comprising defining the level of priority for the allocation of time slots to one or more of said channels so that a higher level of priority is assigned for allocation of time slots to channels carrying traffic pertaining to real-time

applications, such as voice or video applications, whereas a lower level of priority is assigned for allocation of time slots to channels carrying bursty data traffic.

LAW OFFICES OF
MacPherson, Kwok, Chen &
Heid LLP

1762 Technology Drive
Suite 226
San Jose, CA 95110
(408)-392-9520
FAX (408)-392-9262